AP Associated Press

Johns Hopkins raps AP story on lead experiment

By MALCOLM RITTER – **9 hours ago**

For about 20 years, Dr. Michael Klag has used a fertilizer made from Milwaukee municipal sludge on azaleas and yew shrubs at his suburban Baltimore home. And Klag, dean of the Johns Hopkins School of Public Health, says he's never had any question about its safety.

But in the past few weeks, he has found himself reassuring the public about a similar product, a compost made with treated municipal sewage sludge in Baltimore. Johns Hopkins researchers spread it on nine yards in poor black Baltimore neighborhoods in an experiment eight years ago.

That's become a cause for outrage among some politicians and others who have called for an investigation. The trigger was an Associated Press story in April that raised questions about the Baltimore experiment and whether there has been adequate testing to determine if sludge is safe.

The AP story described the Baltimore experiment, which was done in areas with high lead levels in soil and high rates of lead poisoning in children. Researchers reported that adding the compost to the dirt could cut the risk from lead by reducing the metal's ability to be absorbed by the body.

But the AP story described concerns about whether using treated sludge in such an experiment is itself hazardous.

In response, the Maryland NAACP asked the state attorney general to investigate the study. Sen. Barbara Mikulski and Rep. Elijah Cummings, both D-Md., asked for a federal investigation. And Sen. Barbara Boxer, D-Calif., cited the Baltimore study and said a committee she chairs will investigate the risks of using such material in neighborhoods.

Klag says the AP story was "inaccurate and misleading" because it gave the sense that "somehow we targeted vulnerable families for use of a product that we would never, ever consider using ourselves. It's just not true."

The sites of the experiment were chosen for their high lead levels, not to take advantage of people who lived there, Klag said.

And while the AP story said families in the Baltimore experiment weren't told of safety disputes and health complaints regarding use of treated sludge on land, Klag's school says it doesn't know of any research suggesting the compost itself poses a known risk to people.

"We used a commercial, off-the-shelf product that's highly regulated by both the federal and the state governments" and used widely at all levels of society, Klag said.

Mike Silverman, the AP's senior managing editor, said the story suggested the compost could be riskier than has been shown so far.

"It is a subject of scientific debate," Silverman said. "Many researchers believe the compost is safe, but there are some who believe it may be dangerous and should be studied further.

"The original AP story leaned too heavily on the latter view. That was unbalanced, and it created a distorted impression about the level of risk in the Baltimore experiment."

The compost, sold under the brand name Orgro, also contains wood chips and sawdust. It has been applied on virtually every golf course within 50 miles of Baltimore's composting plant, according to the company that operates the plant. It was also used several years ago on the the grounds of the vice president's official residence, according to a spokeswoman for the vice president's wife, Lynne Cheney.

Peter Lees of Johns Hopkins, one of the researchers involved in the 2000 experiment, said he wasn't aware of any question "from anybody anywhere" about using the compost at that time.

"It was a product you could get at Home Depot (and) garden stores," he said. "It met federal and state standards, so I guess at that point, what's the question?"

In technical terms, the compost contains "Class A biosolids," meaning it's been treated to cut germs to undetectable levels, and is rated "exceptional quality," indicating it meets certain requirements for heavy metal content. It's approved for use on lawns and home gardens.

Experts contacted recently by the AP generally said they didn't consider such material to be dangerous.

Klag said the AP story didn't clearly distinguish the compost from a different category of material, Class B treated sludge, which has been the object of some health concerns. Class B material can still have detectable levels of germs and isn't approved for lawns or home gardens. It's used to fertilize farmland, reclaim surface mines, cover landfills and help forested areas regrow

after fire or erosion damage.

The AP story said there's been a lack of research into possible harmful effects from spreading treated sludge on land. It quoted the chairman of a National Academy of Sciences committee that looked into the practice as saying more safety studies are needed, and that sludge contains "potential pathogens and chemicals that are not in the realm of safe."

But the chairman, Thomas Burke of Johns Hopkins, said in a recent interview he was not talking about Class A material. (A transcript of the original interview is not clear on this point). Asked in the recent interview about the safety of Class A, the designation for the compost used in Baltimore, he said he'd defer to other scientists, but added that it's widely used "and there's really not evidence out there that there's any kind of adverse effect."

The 2002 report from his committee said it considered both classes of sludge and concluded that while nobody had documented harm to human health, more health studies were needed to address "persisting uncertainty" about the potential risks. But Burke said the report was chiefly concerned with Class B rather than Class A.

"We really didn't focus on composting because of the extra level of treatment," Burke said in the recent interview. "We focused very much on Class B."

Another committee member, Ian Pepper of the University of Arizona, agreed that the report was "almost entirely focusing on Class B. ... The potential hazards associated with Class A are minimal." (Pepper directs a National Science Foundation center on water quality that receives some industry funding).

Sally Brown of the University of Washington, who studies ways to treat contaminated soil, called compost safe and said the Johns Hopkins experiment got impressive results for reducing the hazard from lead in soil.

But Murray McBride, director of the Cornell Waste Management Institute, who was quoted in the original AP story, said he still sees cause for concern in materials that meet Class A and exceptional-quality standards.

The exceptional-quality standard doesn't include testing for some potentially harmful metals and other chemicals that can appear in sludge, he said. Without such testing, "how would you know" whether a product contained worrisome levels of those substances, he asked.

McBride said he was aware that Orgro, the compost in the Hopkins experiment, was used by consumers in the Washington area. But he suggested most buyers don't know it comes from treated sludge.

He said buyers of a commercial fertilizer made from sludge were surprised when he told them where it came from, and some said they would stop using it.

Rufus Chaney, a U.S. Department of Agriculture researcher who co-authored the Baltimore study, said he's not deterred by the possibility of undiscovered hazards in compost that comes from treated sludge.

"We don't have perfect knowledge, but we don't have any evidence that we're failing to be adequately protective," he said. It is "pretty far-reaching to claim there's a risk."
